

ELY RURAL DISTRICT COUNCIL.

REPORT

For the Year 1907,

BY

BUSHELL ANNINGSOON, M.D., M.A.,

CAMBRIDGE UNIVERSITY LECTURER IN MEDICAL JURISPRUDENCE ; EXAMINER IN
STATE MEDICINE IN THE UNIVERSITIES OF CAMBRIDGE AND BIRMINGHAM ;
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BOARD OF EXAMINERS, THE ROYAL SANITARY INSTITUTE ; FELLOW
AND MEMBER OF THE COUNCIL ROYAL INSTITUTE PUBLIC
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DEPARTMENT, SOUTH KENSINGTON ; ASSOCIATE
KING'S COLLEGE, LONDON ;
&c., &c.,

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ELY RURAL DISTRICT COUNCIL.

REPORT.

I BEG leave to communicate to the Ely Rural District Council my Annual Report for the year 1907, on “the conditions affecting the health in the District and the means for improving those conditions,” and in addressing myself to this task I have to point out to the Council that by the “Memorandum as to Annual Reports of Medical Officers of Health,” issued by the Local Government Board, I am directed to discuss prescribed subjects and give information which may seem superfluous to the Council. The following extract from the Memorandum, will make clear the intentions of the Local Government Board.

“As subjects concerning which the Board may desire to obtain, through Annual Reports of the Medical Officer of Health, not only definite general information, but record also of particular changes of condition that may have occurred incidentally or by action of the Local Authority, the following deserve to be especially borne in mind :—

“Physical features and general character of the District.

“The chief occupation of the inhabitants and the influence of any particular occupation on public health.

“House accommodation, especially for the working classes : its adequacy and fitness for habitation. Sufficiency of open space about houses, and cleanliness of surroundings. Supervision over erection of new houses. Action under the Housing of the Working Classes Act.

“Sewerage and drainage : its sufficiency in all parts of the District. Condition of sewers and house drains. Method or methods of disposal of sewage. Localities where improvements are needed.

- “Pollution of rivers and streams in the District ; sources and nature of such pollution and any action taken to check it.
- “Excrement disposal : system in vogue ; defects, if any.
- “Removal and disposal of house refuse—whether by public scavenger or occupiers : frequency and method.
- “Water supply of the District or its several parts : its source (from public service or otherwise), nature (river water, well water, upland water, etc.), sufficiency, wholesomeness, and freedom (by special treatment or otherwise) from risks of pollution.
- “Places over which the Council have supervision, *e.g.*, lodging houses, slaughterhouses, bakehouses, dairies, cowsheds, and milkshops, factories and workshops, and offensive trades.
- “Schools : especially public elementary schools, sanitary conditions of, including water supply ; action taken in relation to the health of the scholars, and for preventing the spread of infectious disease.
- “Byelaws : steps taken for their enforcement, any need of amendment, or of further byelaws.
- “Nuisances : proceedings for their abatement—any remaining unabated.
- “Methods of dealing with infectious diseases : notification, isolation hospital accommodation and its sufficiency ; disinfection.

With regard to such points it should be remembered that these reports are for the information of the Board and of the County Council as well as of the Council of the District, and that a statement of the local circumstances and a history of local sanitary questions, which may seem superfluous for the latter, may often be needed by the former bodies.”

“In reference to Schools it is desired to draw particular attention to the memorandum on Medical Inspection of Children in Elementary Schools issued by the Board of Education in November of this year (1907), dealing with the new duties thrown upon Local Education

Authorities, in this respect, by Section 13 of the Education (Administrative Provisions) Act, 1907”

Section 132 of the Factory and Workshops Act, 1901, which came into force on January 1st, 1902, requires that—The Medical Officer of Health of every District Council shall on his annual report to them report specifically on the Administration of this Act in Workshops and Workplaces, and he shall send a copy of his Annual Report or so much of it as deals with this subject to the Secretary of State.

VITAL STATISTICS.

Inasmuch as a decrease in the population is governed by migra- Vital Statistics.
Population.
tion rather than by relation of birth-rate and death-rate, as is the natural increase, there is no certain factor by which the population can be estimated, but having regard to the number of houses erected at Littleport I have estimated the population of that sub-district at 4598, and use this estimate as the basis of calculation of Vital Statistics, which are as follows:—

The total number of deaths which have been registered in the Deaths and
Death-rate.
district is 158, but this number must be corrected by the addition of deaths of persons belonging to the district which have occurred in public institutions outside its boundary, viz.: in the Workhouse (situate within the urban district of the City of Ely), 22, and in the County Asylum, at Fulbourn, 5, making a corrected total of 185, which on my estimate gives an annual death-rate of 14·50 per thousand living; a rate a little lower than that for the previous year. The mean rate for the previous ten years is 15·1. The death-rate in England and Wales for the year 1907 is given as 15·0 in the summary of the Registrar-General, contained in the appendix to his Report for the last quarter of the year.

The deaths due to epidemic diseases are:—from Whooping Epidemic
Death-rate.
Cough, 1; Typhoid Fever, 1; Diarrhœa, 1; total 3; equal to an annual death-rate from these diseases of 0·23 per thousand living.

Influenza has caused two deaths.

Influenza.

Births and
Birth-rate.

The total number of births registered is 291, equal to a birth-rate of 22·60 per thousand living per annum. The mean rate for the previous ten years is 25·00. The birth-rate for England and Wales for the year 1907 is given as 26·3, which is lower than the rate in any year on record.

Infantile
Mortality.

The ratio of deaths under one year of age to 1,000 registered births is 65; the rate for the previous year was 117. The mean rate for the previous ten years is 101.

Vital Statistics
of Sub-Districts.

After assigning to each sub-district its share of the deaths in the above three public institutions as per subjoined table, the vital statistics are respectively :—Haddenham, general death-rate 13·74, epidemic death-rate 0·0, birth-rate 19·1; Sutton, general death-rate 15·89, epidemic death-rate 0·6, birth-rate 23·1; Littleport, general death-rate 12·83, epidemic death-rate 0·4, birth-rate 23·7; Downham, general death-rate 17·70, epidemic death-rate 0·0, birth-rate 24·9.

Sub-District.	Registered Deaths.	Addenbrooke's Hospital.	Workhouse.	County Asylum.	Total.	Death Rate.
Haddenham	41	—	3	2	46	13·74
Sutton ...	29	—	8	1	48	15·89
Littleport...	52	—	6	1	59	12·83
Downham	26	—	5	1	32	17·70
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	158	0	22	5	185	14·60
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

Comparing the birth-rate of the several sub-districts with the average rate for the previous ten years it would appear that the birth-rate of the Haddenham sub-district is 5·9 per thousand below the average; for Sutton 1·9, Littleport 1·3, and that for Downham practically identical.

Comparing the death rates in the same way it would appear that the rates of Haddenham and Littleport sub-districts respectively are 1·36 and 2·27 below the average, and the rates for the Sutton and Downham sub-districts 0·79 and 2·60 above it.

Diarrhœa.

The number of deaths from Diarrhœa among persons belonging to the district is one only.

The number of deaths from Phthisis and Cancer respectively ^{Phthisis and Cancer.} among persons belonging to the district is 12 and 19, and the death-rate per thousand living from these diseases is 0·9 and 1·4.

The death and death-rate from Diarrhœa, Phthisis and Cancer among persons belonging to this district, during the previous ten years, are set out in the following table :—

	Diarrhœa.				Phthisis.				Cancer.			
	Deaths.		Death-Rate.		Deaths.		Death-Rate.		Deaths.		Death-Rate.	
1897	...	2	...	0·15	...	30	...	2·37	...	13	...	1·02
1898	...	10	...	0·79	...	19	...	1·50	...	17	...	1·34
1899	...	6	...	0·47	...	15	...	1·19	...	8	...	0·63
1900	...	0	...	0·00	...	19	...	1·52	...	7	...	0·56
1901	...	2	...	0·16	...	15	...	1·20	...	20	...	1·61
1902	...	0	...	0·00	...	12	...	0·96	...	17	...	1·36
1903	...	1	...	0·08	...	14	...	1·12	...	18	...	1·45
1904	...	3	...	0·24	...	20	...	1·61	...	18	...	1·45
1905	...	4	...	0·32	...	11	...	0·87	...	14	...	1·12
1906	...	4	...	0·32	...	11	...	0·87	...	7	...	0·57
Average	—		—		—		—		—		—	
for years	3·2		0·25		16·6		1·32		13·9		1·11	
1897-1906	—		—		—		—		—		—	

DISEASE INCIDENCE.

Disease of an infectious character has been considerably less ^{Disease Incidence.} prevalent during the year than during 1906. The total number of cases notified during the year is 64 (four fatal).

The number of cases notified in each of the ten years, 1897—1906, are as follows :—106 in 1897, 166 in 1898, 108 in 1899, 90 in 1900, 107 in 1901, 62 in 1902, 45 in 1903, 120 in 1904, 134 in 1905, and 105 in 1906, total 1043. The mean case rate is 8·4.

No case of Small Pox has been notified in the district during ^{Small Pox.} the year, and only one case has been notified in the district during the previous ten years.

Thirty-five cases (none fatal) of Scarlet Fever have been notified, ^{Scarlet Fever.} of which thirty occurred in the Littleport area ; two at Sutton, one in

February and one in December ; one at Stretham in June ; and two at Wentworth, in separate families, in July ; the case rate equals 2·7 per thousand.

Twenty-two cases in fourteen households have been notified in Littleport Town ; and nine cases in two households occurred in the Fen. One case in the Fen occurred in January and eight in one household in November ; the first could not be accounted for, but the latter group was traceable outside the District and was not in any sense epidemic in this part of the District ; in Littleport Town on the other hand twenty-one cases formed a more or less continuous series, from February 2 to June 10. The last case was sporadic and occurred at the end of November.

The number of cases of Scarlet Fever notified, and the number of deaths registered during each of the ten years 1897—1906, are set out in the following table :—

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total.
Cases ...	74	121	53	65	58	40	15	74	15	65	580
Deaths ...	—	—	2	1	1	1	—	—	2	2	9

Diphtheria. Three cases of Diphtheria (none fatal), have been notified during the year, equal to a case rate per thousand of the population of 0·24.

In the Haddenham sub-district, one case occurred at Wilburton and two at Haddenham ; they were very mild, and the source of infection could not be traced.

The number of cases of Diphtheria notified, and the number of deaths registered during each of the ten years 1897—1906, are set out in the following table :—

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total.
Cases ...	3	25	2	7	35	3	7	23	15	9	129
Deaths ...	—	4	1	1	2	—	—	—	2	—	10

Twelve cases (one fatal) of Typhoid Fever in ten houses have been notified.

One case occurred at Cannon Street, Downham, at the end of November, the water supply and sanitary conditions were satisfactory and no source of infection could be traced; the remaining eleven occurred at Littleport. Three cases in two households occurred in Littleport Fen, in March and July respectively, and were probably associated with drinking water from the Fen Ditches; the remaining eight cases in seven households in the Town occurred, two in February, one in March, two in July, three in September and October; one of the cases occurred at Sand Hill and a second at Beaconsfield Terrace during February; one in Wellington Street in March; two in one household, Wisbech road, in July; and three in Coronation Terrace in September and October. It is worthy of remark that cases have been occurring in the Wisbech Road and Sand Hills for three years in succession; it is however, more remarkable that the disease has recurred for the same period in the new houses in Coronation Terrace. Last year there was a history of two of the cases having drunk water from the Ditches in Burnt Fen, but this circumstance does not well explain the occurrence in the very same family and in the very same house of two cases in 1905, one case in 1906, and one case in 1907; the other cases were in different houses and in different families; the recurrence of cases of Typhoid Fever at Coronation Terrace is however explicable on two theories (1) The persistence in the evil about the houses of the bacillus typhosus and (2) more probable the presence of human "carriers" of the microbe.

The number of cases of Typhoid Fever notified, and the number of deaths registered during each of the ten years, 1897—1906, are set out in the following table:—

	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total.
Cases ...	18	5	37	4	2	1	13	38	22	21	161
Deaths ...	2	2	7	1	1	—	1	1	2	3	20

No cases of Puerperal Fever have been notified during the year. Puerperal
Fever.

Thirteen cases (none fatal) of Erysipelas have been notified during the year, viz. :—one in the Sutton sub-district, eleven in the Littleport sub-district, and one in the Downham sub-district. The case rate per thousand of the population is 1·0.

Erysipelas. The number of cases of Erysipelas notified, and the deaths registered during each of the ten years, 1897—1906, are set out in the following table :—

		1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	Total.
Cases	...	11	15	16	12	12	16	8	17	19	10	136
Deaths	...	—	—	—	—	—	—	—	—	—	—	Nil.

Other Notifiable Diseases. There have been no cases of other notifiable diseases during the year.

Mumps. Mumps prevailed at Stretham during part of March and April, and among the pupils of the Westends School, Littleport, during
 Chicken Pox. December, also Chicken Pox among pupils of the same school during July.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

Physical Features. The Ely Rural District includes a number of the Isle of Ely or low hills of Kimeridge clay, situate mainly on the area indicated in Sketchley's Memoir of the Geological Survey as "Peat Land," while Littleport is included in the "Silt Land" area. There is an area of Boulder Clay and Gravel at Portley Hill (high ground to the south of Littleport), whence part of the water supply to the wells in the Town is obtained. In the southern part of the district, including Haddenham and Stretham, there are outliers of Green Sand, also one near Witchford; in other parts of the district there are shallow patches of drift gravel and sand, especially at Sutton, where unfortunately it has been largely removed. The district forms a triangular area, bounded on the East by the great watercourses of the Ouse; on the West by the New Bedford Level, and on the South by the depleted Old West River.

HOUSE ACCOMMODATION.

House Accommodation House accommodation in the District is fairly adequate in quantity for the needs of the rural population, but there are, however, in some parts of the district, especially in the Fen, dwellings which

require sanitary attention. During the past few years houses unfit for human habitation have been in due course reported, and either repaired or vacated, and in some instances have been pulled down, so that there is less defect of this character than formerly. The house accommodation at Littleport has been materially increased, so that the insufficiency adverted to in some of my past reports is not so pressing; there are in some parts a few squatters occupying their own houses, which in the nature of things are not so satisfactory as the houses owned by persons of some pecuniary means; these defects are, however, to a large extent balanced by the open space about the houses, and, indeed, there are very few instances in the villages proper of serious density of population. Where there is ample space the cleanliness of the surroundings varies very much according to the character of the occupants of the houses. Any serious conditions of this kind are kept under control by the activity of the Inspector of Nuisances.

It has become the practice in many parts of the district to cover the thatched houses with corrugated iron, whereby are combined the advantages of the non-conductivity of heat by the thatch, cleanliness of the external surfaces of the roofs, and suitability for the collection of rain water.

One case of overcrowding at Littleport has been abated by an addition to the house. One case at Wardy Hill, Coveney, has been abated by the removal of part of the family.

Houses have been erected during the year at the following villages:—Haddenham, 2; Littleport, 17; Stretham, 1; Sutton, 2; Downham, 3.

Although there is no official supervision over the erection of new houses, in every instance a certificate as required by Section 6 of the Public Health (Water) Act, 1878, is insisted upon before occupancy.

It is worth the consideration of the Council whether they should take advantage of the provisions of the Housing of the Working

Classes Acts, 1900, and 1903, which amend the Housing of the Working Classes Act, 1890, for the better housing of the rural populations.

SEWERAGE AND DRAINAGE.

Sewerage and
Drainage.

With regard to the sufficiency of Sewerage and Drainage, the only villages in the district where *systems* of public sewers are provided, are Haddenham, Littleport, Downham and Stretham. It has not been found possible to subject the sewage to any special treatment, except on a small scale in a few instances at Littleport, nor does that seem particularly needful, for the sewage can be discharged into the Fen ditches, the water of which is not used for drinking purposes, and the sewage is rapidly purified by the ordinary influence of nature nearly as well as if passed on to specially prepared sewage farms. There are, unfortunately, some instances where the method of sewage disposal causes a nuisance by polluting the water courses, but the most serious instance is the pollution by the drainage of other Districts into the Ouse and its tributaries above the intake of the chief water supply of Littleport, the like pollution of the New Bedford River, or Hundred Foot Drain is not quite so serious, but its supply affects Mepal and dwellings along the banks.

At Wilburton application has been made by the Parish Council to the District Council for skilled advice as to levelling for a projected extension and deepening of the present sewer.

At Hilrow, Haddenham, a new sewer $3\frac{1}{2}$ chains long has been laid in; at Witchford, a new sewer 190 yards 6 inches has been laid in.

At Downham, Haddenham, Stretham and Sutton, the ditches at the end of the sewers have been cleaned out, and the "Zumps" at Stretham have also been cleaned.

The street gulleys in every parish have been cleaned and disinfected when necessary.

EXCREMENT DISPOSAL.

In those villages, or parts of villages where there is no sewer ^{Excrement Disposal.} accommodation there are pit privies, but these are gradually being substituted by earth closets. During the year sixty-five earth closets have been substituted for pit privies, and the pits have been filled up.

The excrement from both pit privies and earth closets is disposed of on garden ground.

A good method of dealing with slop water to obviate pollution of a water-bearing stratum is disposal in water-tight cesspools provided with a radiating sub-soil irrigation system at the top.

REMOVAL AND DISPOSAL OF HOUSE REFUSE.

The house refuse is disposed of by the occupiers temporarily in ^{Removal of Refuse.} ashpits, which in a few instances are too near the dwellings, and subsequently on garden ground. It might be worth while for the Council to consider whether systematic scavenging might not be instituted in several of the larger villages of the District.

WATER SUPPLY.

The method of water supply varies considerably in different ^{Water Supply.} parts of the District, as follows :—

At Mepal, Wardy Hill, and parts of Littleport and Downham, the supply is obtained from the rivers, ditches and ponds.

At Haddenham, Witchford, Wentworth, Wilburton, Witcham, Sutton, Stretham, and parts of Littleport and Downham, the supply is obtained from wells. In regard to an outlying part of Sutton, away from the gravel patches complaints had been received during the previous year; it was found that even if the local pollution could be remedied, the only available supply was of indifferent quality from Boulder clay on neighbouring property; a supply is now obtained by cart from Ely.

In the Fen area, which is situated mainly on Fen silt and Kimeridge clay, rain water is the only supply, and this is stored in tanks of galvanized iron of a capacity of two hundred gallons and upwards, according to the requirements of the householders ; but it should be noted that this sort of water supply was placed by the Rivers Pollution Commissioner very low in the scale of relative purity ; in all cases it should be filtered and boiled before use.

In the instances where the supply is obtained from the river it is made to pass through a filter of sand and polarite before being used. The same remarks apply to the pond supply at Wardy Hill.

The well water varies very much in character ; in some places, such as the south side and centre of Littleport, it is not of high-class quality even apart from local pollution, derived as it is from gravel patches underlying cultivated land and dwellings, and from Boulder clay.

At Witchford the supply from the shallow wells is not satisfactory, and an excellent supply could be obtained from the Greensand about a mile from the Village on the Ely Road.

The villages situated on the Greensand are Haddenham, Wilburton, and part of Stretham. All the other villages in the District, with the exception of part of the Fen, are situate on low hills of Kimeridge clay.

The shallow wells derive their supply of water in certain parts of the District from the gravel resting on the Kimeridge clay.

Aldreth has the advantage of a natural spring, probably of Greensand origin.

All the filters at Littleport have been cleaned and re-charged with polarite, and are working satisfactorily.

Parish pumps have been repaired at Downham, 4 ; Haddenham, 3 ; Littleport, 9 ; Stretham, 2 ; Witcham, 1 ; Mepal, 1.

Parish ponds have been cleared out at Haddenham, 2 ; Stretham, 1 ; Witchford, 1 ; Sutton, 1 ; Pymore, Downham, 1 ; Wardy Hill, Coveney, 1.

At Wolney Hill, Witcham, two old houses have been provided with galvanised iron tanks (200 gallons each) for the storage of rain water from a slate roof.

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The slaughterhouses in the District have been regularly inspected, ^{Inspections.} and any defects which have been discovered have, on notice from the Inspector of Nuisances, been remedied. New cement floors, proper drains and blood holes have been provided at slaughterhouses at Littleport and Sutton.

No regulations have been adopted by the Council for the control of Dairies, Cowsheds and Milkshops, but there are only nine Milk Purveyors in the whole of the District, namely, at Haddenham 2, at Wilburton 1, at Sutton 3, and at Littleport 3.

FACTORIES AND WORKSHOPS.

The work of Inspection of Factories and Workshops is done by <sup>Factories and
Workshops.</sup> the Inspector of Nuisances, who has been specially appointed for the purpose.

FACTORIES.—There is at present recorded only one factory in the District where more than forty persons are employed, and this has been examined with regard to the provisions of escape in case of fire.

WORKSHOPS.—Sixty-two inspections of workshops have been made during the year, and in no instance have any contraventions of the Act been discovered. No special notification of any defects or neglect on the part of the occupiers in carrying out the provisions of the Act have been received from H.M. Inspector during the year.

BAKEHOUSES.—In this district there are twenty-eight bake-houses on the register, and these have been periodically inspected during the year, and the special regulations contained in the Act have been enforced.

HOME WORK.—During the year a list containing the addresses of thirty-two outworkers residing in the district has been received, and the premises occupied by them have been inspected, but in no instance has the dwelling been found to be so unhealthy as to necessitate the District Council prohibiting home work being done therein, and no case of infectious disease has appeared in any of them.

REGISTER OF WORKSHOPS.—The number of workshops at present recorded are 128, including 28 bakers, 4 brickmakers, 26 dressmakers, 17 carpenters, 13 shoemakers, 16 smiths, 6 cheese factors, 6 tailors, 6 sadlers, 2 milliners, 1 basket maker, 2 wheelwrights and 1 printer.

NUISANCES.

Nuisances of various kinds as indicated in the Inspector's Table in the appendix to the report have been dealt with.

METHODS OF DEALING WITH INFECTIOUS DISEASES.

The methods of dealing with Infectious Diseases are by notification, followed by enquiry by the Medical Officer of Health, Inspector of Nuisances, or by both, according to the importance of the cases.

Isolation
Hospital, etc. There is yet no isolation hospital in the District for other diseases than Small Pox, and as it is now unlikely that this building will now be required for cases of this disease, it might with advantage be utilised for cases of other infectious diseases. In the absence of such an institution, advice is given to the householders as to the best means of isolation of cases in their own homes. The Schools Authorities are informed of the households in which infectious diseases have appeared, with a request to exclude all the members until they are free from infection. When epidemic influence shows a tendency to spread, the Schools Authorities are asked to close the schools.

In threatened outbreaks of Diphtheria prophylactic doses of Anti-toxin are recommended for the protection of all persons known to have been exposed to the chances of infection, and bacterial examination of rubbings from the throats and nasal passages of all known

“Contacts” is recommended for the discovery of any unsuspected case of the disease. This method loses much of its value in the absence of any means of isolating the “Contacts.”

At the conclusion of a case, the infected rooms and the articles contained therein are disinfected by aerial disinfectants, but there is no machinery in the district for disinfection by heat or steam.

ADOPTIVE ACTS.

The Infectious Diseases (Prevention) Act, 1890, and the Public Health Acts (Amendment) Act, 1890, have not yet been adopted.

The Public Health Act (Amendment) Act, 1907, contains some provisions, which, if adopted, would be useful.

All the above remarks, together with the tables of Statistics required by the Local Government Board, and the Inspector's record of work, I respectfully submit to the Rural District Council.

BUSHELL ANNINGSON.

TABLE I.
For the Whole Rural District of Ely.
 Table shewing Vital Statistics for the year 1907 and the
 antecedent ten years.

YEAR.	Population—estimated to the middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES belonging to the District.	
				UNDER ONE YEAR OF AGE.		AT ALL AGES.					Number.	Rate.*
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1897.....	12656	362	28·6	41	113	202	15·9	None in District.	None in District.	18	220	17·3
1898.....	12604	310	24·6	33	106	184	14·6			22	206	16·3
1899.....	12545	313	24·9	34	108	156	12·4			17	173	13·7
1900.....	12479	324	25·9	31	95	178	14·2			29	207	16·5
1901.....	12405	313	25·2	40	127	177	14·2			20	197	15·8
1902.....	12405	287	23·1	27	94	152	12·2			21	173	13·9
1903.....	12405	311	25·0	29	93	186	14·9			20	206	16·6
1904.....	12405	320	25·8	32	100	178	14·3			28	206	16·6
1905.....	12405	302	24·2	19	63	151	12·2			23	174	14·0
1906.....	12505	298	23·0	35	117	168	13·4			22	190	15·2
Averages for years 1897—1906	12471	314	25·0	32	101	173	13·8	...	...	22	195	15·1
1907.....	12767	291	22·6	19	65	188	12·3	...	...	27	185	14·6

* Rates calculated per 1,000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity and dying in Public Institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in Public Institutions elsewhere.

The Public Institutions taken into account for the purposes of this and the following tables are the Union Workhouse, Ely; Addenbrooke’s Hospital, Cambridge; and Fulbourn Asylum.

Area of District in acres (exclusive of area covered by water).....	64,516	} At Census of 1901.
Total population at all ages	12,405	
Number of inhabited houses	2,913	
Average number of persons per house	4·2	

TABLE II.

Ely Rural District.

Table shewing Estimated Population, Births, Corrected Deaths at all ages and Infant Mortality for the year 1907 and the antecedent ten years.

NAMES OF LOCALITIES.	1 Whole District.				2 Haddenham.				3 Sutton.				4 Littleport.				5 Downham.			
	Population estimated to the middle of the year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to the middle of the year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to the middle of the year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to the middle of the year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population estimated to the middle of the year.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
YEAR	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
1897.....	12656	362	220	41	3414	98	64	9	3156	82	57	9	4239	121	67	13	1847	61	32	10
1898.....	12604	310	206	33	3401	90	53	8	3127	63	55	5	4239	118	72	17	1837	39	26	3
1899.....	12545	313	173	34	3385	75	39	6	3095	79	42	8	4239	112	62	12	1826	47	30	8
1900.....	12479	324	207	31	3367	86	56	13	3059	75	53	4	4239	113	59	9	1814	50	39	5
1901.....	12405	313	197	40	3347	76	49	9	3021	66	44	5	4236	114	73	19	1801	57	31	7
1902.....	12405	287	173	27	3347	62	56	7	3021	77	42	6	4236	103	59	11	1801	45	16	3
1903.....	12405	311	206	29	3347	72	44	4	3021	76	51	6	4236	115	74	13	1801	48	37	6
1904.....	12405	320	206	32	3347	68	54	8	2021	78	62	7	4236	124	67	15	1801	50	23	2
1905.....	12405	302	174	19	3347	80	58	6	3021	74	45	6	4236	85	42	4	1801	63	29	3
1906.....	12505	298	190	35	3347	63	60	8	3021	78	45	10	4336	111	60	9	1801	49	25	8
Averages of years 1897—1906	12481	314	195	32	3365	76	53	8	3056	75	50	7	4247	112	63	12	1813	51	29	5
1907.....	12767	291	185	19	3347	66	46	3	3021	70	48	7	4598	110	59	5	1801	45	32	4

NOTES.—(a) The separate localities adopted for this table are areas of which the population is obtainable from the census returns. Block 1 is used for the whole district; and blocks 2, 3, 4 and 5 for the several localities.

(b) Deaths of residents occurring in Public Institutions beyond the district are included in sub-columns *c* of this table, and those of non-residents registered in Public Institutions in the district excluded.

(c) Deaths of residents occurring in Public Institutions, whether within or without the district, are allotted to the respective localities, according to addresses of the deceased.

TABLE III.
Ely Rural District.

Cases of Infectious Disease notified during the Year 1907.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.			
	At all Ages.	At Ages—Years.					1 Haddenham	2 Sutton.	3 Littleport.	4 Downham.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.				
Smallpox ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	3	...	1	1	...	1	3	...	...	...
Membranous Croup ...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	13	...	...	1	3	7	...	1	11	1
Scarlet Fever ...	35	...	3	25	5	2	1	4	30	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	12	...	1	3	3	5	...	...	11	1
Relapsing Fever ...	1	...	1	...	...	...	...	...	1	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...
Totals...	64	...	6	30	11	15	4	5	53	2

NOTES.—The localities adopted for this table are the same as those in Tables II. and IV.
There is no Isolation Hospital for any infectious diseases other than Small Pox.

TABLE IV.

Ely Rural District.

Causes of Death at several age periods during the Year 1907.

CAUSES OF DEATH.	Deaths in or belonging to whole District at subjoined Ages.							Deaths in or belonging to Localities (at all Ages).				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Haddenham.	Sutton.	Littleport.	Downham.	
1	2	3	4	5	6	7	8	9	10	11	12	13
Smallpox	NONE IN THE DISTRICT.
Measles ... ..	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	1	1	...	...	...	...	...	...	1	...	...
Diphtheria and Membranous Croup	...	...	...	...	...	...	...	...	...	...	...
Croup... ..	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus ... ..	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	1	...	...	...	1	...
	
Epidemic Influenza	2	...	...	...	...	1	1	...	...	2	...
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa. (See notes on next page)	1	1	...	...	...	...	...	...	1	...	...
Enteritis. (See notes on next page)	1	1	...	...	...	...	...	...	...	1	...
Puerperal Fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...	...
Other septic diseases ... ..	...	...	...	...	...	...	...	...	...	...	...
Phthisis	12	...	...	...	3	8	1	3	5	3	1
Other tubercular diseases	9	...	3	4	2	...	...	3	3	3	...
Cancer, malignant disease	19	...	...	...	1	7	11	6	3	8	2
Bronchitis	9	...	1	...	...	1	7	2	...	5	2
Pneumonia	15	...	...	1	2	7	5	4	3	4	4
Pleurisy ... ..	...	...	...	...	...	...	...	...	...	...	...
Other diseases of Respiratory Organs	2	1	1	...	...	...	...	1	...	...	1
Alcoholism. Cirrhosis of liver	1	...	...	...	...	1	...	...	1	...	...
Venereal diseases ... ..	...	...	...	...	...	...	...	...	...	...	...
Premature birth	6	6	...	...	...	...	...	...	3	...	3
Diseases and accidents of Parturition	2	...	...	...	...	2	...	...	1	...	1
Heart diseases	14	...	...	...	...	6	8	6	2	4	2
Accidents	4	...	...	...	...	1	3	...	...	3	1
Suicides	2	...	...	...	...	1	1	1	...	1	...
Not certified ... ..	...	...	...	...	...	...	...	...	...	...	...
All other causes	84	9	1	2	1	14	57	20	25	24	15	
All causes	185	19	6	7	9	50	94	46	48	59	32	

TABLE V.
Ely Rural District.

INFANTILE MORTALITY DURING THE YEAR 1907.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.			Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	TOTAL DEATHS UNDER ONE YEAR.
All Causes.	Certified ...	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Uncertified	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Infectious Diseases.	Small-pox ...	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles ...	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria; Croup	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Whooping Cough	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Diarrhœal Diseases.	Diarrhœa, all forms	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
	Muco-Enteritis	}	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
	Gastro-Enteritis		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wasting Diseases.	Premature Birth ..	6	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	6
	Congenital Defects	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Want of Breast-milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, Marasmus	1	...	...	1	2	1	...	...	...	...	...	...	...	...	...	...	...	3
Tuberculous Diseases.	Tuberculosis Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tuberculosis Peritonitis:	}	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tabes Mesenterica		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculosis Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Meningitis (<i>not Tuberculous</i>)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions...	...	...	1	...	1	...	...	...	...	...	...	...	...	2	...	...	...	3
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
	Suffocation, overlaying	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Causes	...	...	...	...	...	...	...	...	1*	...	1	...	...	1	...	...	...	3
	Accident	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			7	...	2	1	10	1	...	1	...	1	...	1	3	1	1	...	19

Births in the Year291

Deaths from all Causes at all Ages185

Population (estimated to middle of 1907)12,767

* One died in Ely Workhouse, outside the District.

NOTES TO TABLES IV. and V.

- (a) In Table IV. all deaths of "Residents" occurring in public institutions, whether within or without the district, are *included* with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrar. Deaths of "Non-Residents" occurring in public institutions in the district are in like manner to be excluded from columns 2-8 and of 9-15 of Table III.
 - (b) See notes on Table I. as to meaning of "Residents" and "Non-Residents," and as to the "Public Institutions" to be taken into account for the purposes of these tables. The "Localities" in Table IV. should be the same as those in Tables II. and III.
 - (c) All deaths occurring in public institutions situate within the district, whether of "Residents" or of "Non-Residents," are, in addition to being dealt with as in note (a) entered in the last column of Table IV. The total number in this column should equal the figures for the year in column 9, Table I.
 - (d) The total number of deaths in the several "Localities" in columns 9-15 of Table IV. should equal those for the year in the same localities in Table II., sub-column c. The total deaths at all ages in column 2 of Table IV. should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.
 - (e) Under the heading of "Diarrhœa" are to be included deaths registered as due to Epidemic diarrhœa, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhœa, Dysentery and Dysenteric diarrhœa, Choleraic diarrhœa, Cholera, Cholera nostras.
- In addition, and as regards deaths of children *under one year of age*, under the heading "Diarrhœa" in column 3 (Table IV.) are to be included all deaths classified as "Diarrhœal diseases" in Table V.
- Under the heading of "Enteritis" in Table IV. are to be included only deaths *over one year of age* registered as due to Enteritis, Muco-enteritis, Gastro-enteritis, Gastric catarrh, Gastritis, and Gastro-intestinal catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well defined disease should be included under the latter.
- (f) Under the headings of "Cancer" and "Puereral Fever," should be included all registered deaths from causes comprised within these general terms. Thus: under "Cancer" should be included deaths from Cancer, Carcinoma, Malignant disease, Scirrhus, Epithelioma, Sarcoma, Villous tumor, and Papilloma of bladder, Rodent ulcer. Under "Puerperal Fever," are to be included deaths from Pyœmia, Septicœmia, Pelvic peritonitis, Peri- and Endo-Metritis occurring in the Puerperium.
 - (g) Under "Congenital Defects" in Table V. are to be included deaths from Atelectasis, Icterus neonatorum, Navel hæmorrhage, Malformations, and Congenital hydrocephalus.
 - (h) Under "Tuberculous Meningitis" are to be included deaths from Acute hydrocephalus.
 - (i) Under the "Other Tuberculous Diseases" are to be included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus, and Scrofula.
 - (j) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified"; all other deaths are to be regarded as "Uncertified."

SUMMARY OF THE INSPECTOR OF NUISANCES' REPORT FOR THE YEAR 1907.

1.	Accumulations of filth removed	...	...	...	89
2.	Houses in a bad state of repair reported and in most instances satisfactorily dealt with...	...	...	...	5
3.	Yards to dwellings in an offensive state cleaned	...	...	...	73
4.	Privy nuisances, foul, &c., remedied	...	...	...	120
5.	Privies new, and removed, vault filled up and converted into earth closets	...	...	...	65
6.	Animals kept in an offensive state removed	...	...	...	61
7.	Overcrowding, cases of, abated	...	...	...	2
8.	Water supply deficient and impure, &c.	...	...	...	0
9.	Samples of water taken to County Analyst	...	...	...	0
10.	Wells closed	...	...	...	0
11.	Cases of infectious and contagious diseases visited and supplied with disinfectants	...	...	...	56
12.	Houses disinfected by Inspector	...	...	...	40
13.	Drainage nuisances ; drains repaired and new supplied...	...	...	...	46
14.	Foul ditches cleaned out	...	...	...	40
15.	New gulley to drains	...	...	...	40
16.	Street drains trapped	...	...	...	36
17.	Parish ponds cleaned out	...	...	...	7
18.	New parish pumps	...	...	...	1
19.	Parish pumps repaired	...	...	...	20
20.	New houses erected	...	...	...	25
21.	Certificates granted under sec. 6 of Public Health (Water) Act, 1878	...	...	...	25
22.	Lodging houses registered	...	...	...	0
	Slaughterhouses, visited	...	...	all throughout district	
	Holme's Lode, water supply	...	...	cleared twice	
	Black Bank sewer drains	...	...	cleaned out and roded twice	
	Sewer ditch	...	...	cleaned out twice	
	Two new slaughterhouses	...	...	new cement floors	2
	Workshops inspected	...	...	...	100
	Home workers premises inspected	...	...	...	29
	Bakehouses inspected	...	...	...	28
	Hilrow, Haddenham	...	...	3½ chains of 6in. Sewer laid	
	Witchford	...	...	190 yards of 6in. Sewer laid	
	Wolney Hill, Witcham	{ Two new tanks of 200 gallons each supplied to two old houses.			

W. GREEN,
Inspector of Nuisances.